

## **REMARKS**

Claims 1 and 3-11 are currently pending. The Examiner has provisionally rejected Claims 1, 3, 4, 7, 8, and 11 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1 and 9 of copending Application No. 10/387,739. The Examiner has also rejected claims 1, 3, 4, 7, 8, and 11 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,695,900 to Momose (“Momose”). The Examiner has objected to claims 5, 6, 9, and 10 as being dependant upon a rejected base claim. However, the Examiner has indicated that claims 5, 6, 9, and 10 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following remarks are considered by applicant to overcome each of the Examiner's outstanding rejections and objections to current claims 1 and 3-11. An early Notice of Allowance is therefore requested.

### **I. REJECTION OF CLAIMS 1, 3, 4, 7, 8, AND 11 UNDER DOUBLE PATENTING**

The Examiner provisionally rejects claims 1, 3, 4, 7, 8, and 11 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 9 of copending application No. 10/387,739. The Examiner claims that although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap the published claims and thus would be rendered obvious.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Therefore, Applicants respectfully submit that Applicants will not address the issue of a Terminal Disclaimer until subject matter is allowed by the Examiner.

## II. REJECTION OF CLAIMS 1, 3, 4, 7, 8, AND 11 UNDER 35 U.S.C. § 102(E) BASED ON

### MOMOSE

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

On page 2 of the Office Action, the Examiner rejects claims 1, 3, 4, 7, 8, and 11 under 35 U.S.C. § 102(e) as being anticipated by Momose. These rejections are respectfully traversed and believed overcome in view of the following discussion.

### Independent Claim 1

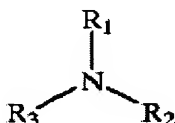
The Examiner contends that Momose discloses all the limitations of independent Claim 1. Office Action (12/28/05), P. 3-4. However, this assertion misconstrues the teachings of Momose.

In relevant part, Momose teaches:

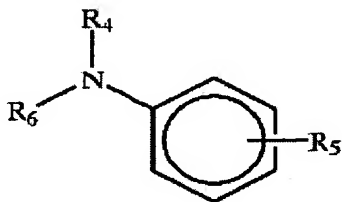
“an aqueous ink composition comprising at least a surface-modified pigment capable of dispersing and/or dissolving in an aqueous medium without use of a dispersant, and organic amine compound represented by the following formula (A) or (B), and water.”

Momose, Col. 2, Lns. 39-45. Where Formulas (A) and (B) are:

(A)



(B)



Wherein R<sub>1</sub> to R<sub>6</sub> each independently represents a hydrogen atom or an alkyl or hydroxyalkyl chain having from 1 to 8 carbon atoms, which may have a branch, provided that at least one of R<sub>1</sub> to R<sub>3</sub> is an alkyl or hydroxyalkyl chain having from 3 to 8 carbon atoms, which may have a branch. Momose, Col. 2, Lns. 47-65.

However, as is described in detail below, nowhere does Momose disclose the concentration of surfactant claimed in Claim 1, nor does Momose disclose the use of an **anionic** self dispersing coloring agent as claimed in Claim 1. Furthermore, the curve of Claim 1 is not an inherent property of the ink disclosed in Momose since Momose fails to disclose an **anionic** self dispersing coloring agent. As such Applicants respectfully assert that the Examiner's rejection stands in error.

Independent Claim 1 recites:

“wherein a curve, which represents a change of surface tension of the ink with respect to a concentration of the surfactant, has one inflection point, the curve has a first local maximum point and a second local maximum point on a low concentration side and on a high concentration side of the inflection point respectively, **and a concentration of the surfactant contained in the ink is higher than a concentration corresponding to the first local maximum point.**”

Response to 7/8/05 Office Action (10/3/05), P. 2 (emphasis added).

Examiner asserts that while the reference remains silent to the curve of Claim 1, Momose teaches a surfactant (Formula (A)) which meets the requirements set forth in Claim 1. As such, the Examiner further asserts that the compound represented by formula (A) would inherently have the same properties and that Claim 1 is therefore anticipated by Momose. However, these assertions overlook a limitation of Claim 1. Namely that “the concentration of the surfactant contained in the ink is higher than a concentration corresponding to the first local maximum point.” This limitation correlates the concentration of the surfactant to the curve of Claim 1. Examiner admits that Momose never discloses such a curve. While the curve itself may represent an inherent property of the ink of Claim 1, the claimed concentration of the surfactant in Claim 1 is not an inherent property. Since Momose never discloses the curve of Claim 1, it is impossible for Momose to disclose the concentration of surfactant of Claim 1 since that concentration is dependant upon the curve. This is but one element of Claim 1 which Momose fails to teach.

Another element of Claim 1 not disclosed by Momose is the use of an **anionic** self dispersing coloring agent. Claim 1 recites: “An ink for ink-jet recording comprising an **anionic** self-dispersing coloring agent...” Response to 7/8/05 Office Action (10/3/05), P. 2 (emphasis added). As discussed above, Momose discloses in general a surface-modified pigment capable of dispersing and/or dissolving in an aqueous medium without use of a dispersant. Momose, Col. 2, Lns. 39-45. Never is this surface-modified pigment disclosed as being anionic, and Examiner never contends otherwise.

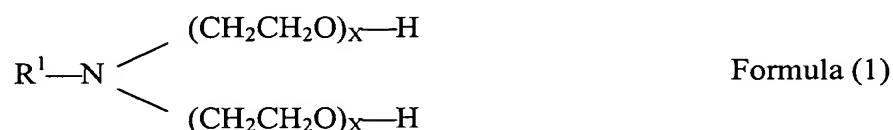
In addition, the curve of Claim 1 has its properties not only because of the surfactant used, but also because of the anionic properties of the anionic self-dispersing coloring agent used. Application, P. 10-13, ¶¶ [0014-0016]. The curve has its properties because the cationic moiety of the surfactant adheres to the anionic self-dispersing agent. Application, P. 10-13, ¶¶ [0014-0016]. Without the anionic self-dispersing coloring agent, the curve of Claim 1 is not an inherent property of the ink. Since, as discussed above, Momose fails to disclose an anionic self-dispersing coloring agent, the ink of Momose cannot inherently disclose the curve of Claim 1.

Thus, Momose fails to disclose at least two elements as set forth in amended independent Claim 1. Furthermore, the curve of Claim 1 is not an inherent property of the ink disclosed in Momose because Momose fails to disclose an anionic self dispersing agent. As such, Applicants respectfully assert that Examiner has failed to establish a prima facie case of anticipation of independent Claims 1 and corresponding claims 3, 4, and 7 because they are all dependant from independent Claim 1. Therefore, Applicants respectfully request that Examiner remove the rejection of claims 1, 3, 4, and 7 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,695,900 to Momose.

### **Claims 4 and 8**

The Examiner contends that Momose discloses all the limitations of Claim 4 and independent Claim 8. Office Action (12/28/05), P. 3-4. However, this assertion misconstrues the teachings of Momose. Namely, as is described in detail below, nowhere does Momose disclose the surfactant of claims 4 and 8.

Claims 4 and 8 both recite a surfactant which is an alkylamine ethylene oxide adduct represented by the following formula (1):



wherein R<sup>1</sup> represents an alkyl group having a number of carbon atoms of 8 to 18, and X and Y represent integers which satisfy X + Y = 5 to 15. Response to 7/8/05 Office Action (10/3/05), P. 2-3.

Examiner admits that Momose fails to teach an ink composition comprising an alkylamine ethylene oxide adduct represented by Formula (1) wherein X + Y = 5 or 15. Office Action (12/28/05), P. 4. Similarly, Applicants assert that Momose also fails to teach the surfactant of Formula (1) wherein X + Y = 6 to 14, and Examiner does not contend otherwise. Therefore, Momose fails to disclose the surfactant of Formula (1) wherein X + Y = 5 to 15. Thus, Momose fails to disclose each and every element as set forth in Claim 4 and independent Claim 8.

As such, Applicants respectfully assert that Examiner has failed to establish a prima facie case of anticipation of Claim 4, independent Claim 8, and corresponding Claim 11 because it is dependant from independent Claim 8. Therefore, Applicants respectfully request that Examiner remove the rejection of claims 4, 8, and 11 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,695,900 to Momose.

III. **OBJECTION TO CLAIMS 5, 6, 9, AND 10 AS BEING DEPENDANT UPON A REJECTED  
BASE CLAIM**

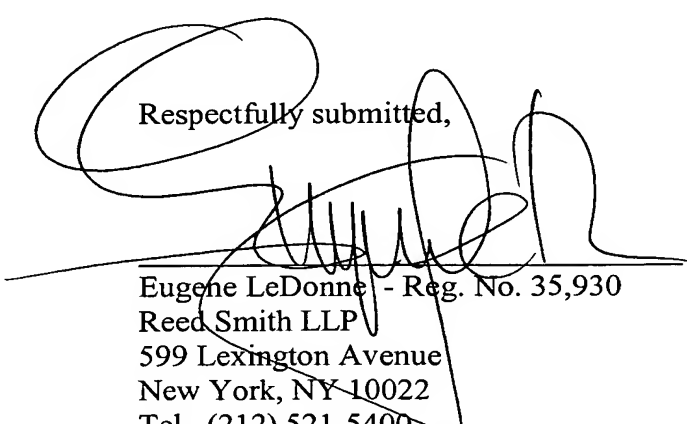
On page 4 of the Office Action, the Examiner objects to claims 5, 6, 9, and 10 as being dependant upon a rejected base claim. These objections are respectfully traversed and believed overcome in view of the following discussion.

Claims 5 and 6 are both dependant from Claim 4, which is in turn dependant from independent Claim 1. As Claim 1 is allowable, so must be claims 5 and 6. Claims 9 and 10 are both dependant from independent Claim 8. As Claim 8 is allowable, so must be claims 9 and 10. It is therefore respectfully requested that Examiner remove the rejection of claims 5, 6, 9, and 10 as being dependant upon a rejected base claim.

Based upon the above remarks, Applicants respectfully request reconsideration of this application and its early allowance. Should the Examiner feel that a telephone conference with Applicants' attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

EL:JWT

Respectfully submitted,

  
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